

**REMARKS**

In the Office Action, claims 1-21 were rejected. By the present Response, no claims are amended, cancelled and/or added. Accordingly, claims 1-21 will remain pending in the present patent application.

**Rejections Under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1, 4 and 8 under 35 U.S.C. § 102(b) as anticipated by Koike (JP 11195533, hereinafter “Koike”). The rejection made by the Examiner of claims 1, 4 and 8 relied upon a Japanese-written patent apparently disclosing pertinent subject matter. In rejecting the claims, the Examiner provided a translated abstract only. Accordingly, the Examiner based the rejection solely on the subject matter disclosed by the translated abstract as well as on figures contained in Koike. Although the figures depict various embodiments, an English translation describing various elements in the figures is not provided. Applicants respectfully submit that, absent a full translated version of the above disclosure Applicants are curtailed in their ability to respond appropriately to the rejection set forth by the Examiner. Never, the, less, given the limited disclosure provided by the Examiner of Koike Applicant traverses the rejection.

Because the references must be considered in their entirety (e.g., Koike may well teach away from aspects of the invention), Applicants kindly request that the Examiner provide an integral translation of Koike so that the Applicants will be given a full and fair opportunity to provide a detailed analysis of the reference and the rejections.

***Legal Precedent***

Anticipation under 35 U.S.C. § 102 requires a showing that each limitation of a claim is found in a single reference, practice or device. *In re Donohue*, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

While no detailed analysis can be made of Koike absent a full translation, based on the very limited disclosure available, the Applicants believe that the rejection of independent claim 1 is improper because Koike does not teach or at least does not appear to disclose each and every element recited in claim 1. For example, independent claim 1 recites “a plurality of leads electrically coupled to the inductor coil and accessible from the modular enclosure.”

In rejecting the claims, the Examiner is relying, assumingly, upon terminals 3b and 3c of Fig. 1 in Koike. Accordingly, the terminals taught in Koike may appear so that they are *not* accessible from the enclosure, but may be coupled to an additional structure preventing their accessibility. However, based on the limited disclosure provided by the Examiner, Applicants cannot make a firm determination regarding the leads and the manner which they are disposed in the enclosure taught by Koike.

Independent claim 1 further recites “modular enclosures having a mounting surface,” and “wherein the modular enclosure is configured for mounting adjacent to similar modular inductors in a multi-phase inductor assembly.” Accordingly, Koike depicts an aperture 21a for coil housing. *See*, Koike, Abstract and Fig. 4. However, the structure shown by Koike does not appear to be a modular enclosure, but rather a single package. It is, therefore, questionable whether the enclosures taught by Koike are configured for mounting adjacent to similar modular inductors in a multi-phase inductor assembly, as recited by claim 1. Again, a full translation of Koike would be need before the Applicants can appropriately formulate a substantive response to the Examiner’s rejection.

Accordingly, absent any further disclosure from Koike Applicant requests the Examiner to withdraw the rejection and allow claims 1, 4 and 8.

**Rejections Under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 2, 3, 6, 7, 9-21 under 35 U.S.C. § 103(a) as being unpatentable over Koike and in view of multiple secondary references (discussed further below). To the extent that Koike cannot be considered for what it teaches, as a whole, absent a full translation, Applicants address the rejections as best they can below, and renew their request for an integral translation of the reference.

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination or modification. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination or modification includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination or modification to render obvious a subsequent invention, there must be some reason for the combination or modification other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination or modification. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

***Disposing a Sensor within the Inductor's Enclosure is not Obvious***

Aside for disclosing insufficient subject matter, Applicants further believe that the current rejection of independent claims 13 and 17 is improper because one of ordinary skill in the art would not be motivated to combine the prior art references that are used to reject the claims. For example, independent claim 13 recites “a current sensor disposed *within the enclosure* and configured to sense current through at least one of the inductors.” (Emphasis added). Similarly, independent claim 17 recites “a current sensor disposed *in the enclosure* and configured to sense current through the inductor coil.” (Emphasis added).

In rejecting claim 13, the Examiner theoretically combined Koike and Jacobson et al. (U.S. Patent No. 6,856,283 hereinafter “Jacobson”) to obviate claim 13. Particularly, the Examiner has combined the apparent conductor disclosed in Koike with a detector circuit disclosed in Jacobson. *See* Koike, Abstract, and Jacobson, claim 6, Figs. 1 and 5. In a similar fashion, the Examiner rejected claim 17 by combining the teachings of Kojori et al. (U.S. Patent No. 6,850,462 hereinafter “Kojori”) with those of Koike. *See* Kojori, col. 10, lines 34-46 and Fig. 1C. Accordingly, in both cases the Examiner has attempted to hypothetically construct an enclosure comprising an inductor and a sensor disposed therein. However, Applicants contend that such a hypothetical construction, seemingly obviating the claims, lacks any motivation at all, as one of ordinary skill in the art would appreciate.

Disposing the sensor inside the enclosure of Koike requires a unique construction of the components within the enclosure and packaging thereof, that is one that would enable the sensor to be *properly* disposed near an inductor and would also enable the sensor to be connected to components outside the enclosure. For example, this would require sensor leads extending from within the enclosure to regions outside the enclosure in a manner maintaining the functional and structural integrity of the enclosure and components therein. Hence, disposing the sensor within the enclosure containing an inductor is an undertaking which encompasses more than just merely hypothetically disposing a sensor adjacent to an inductor inside an enclosure.

In a hypothetical combination, such as the one advanced in the rejection of claims 13, 17, the Examiner must provide some motivation as to why one of ordinary skill in the art would place a sensor *inside* an enclosure containing an inductor. The Examiner simply asserted that “the current sensor as disclosed by Jacobson would have been recognized as pertinent art of Koike.” *See*, Office Action, page 5. In so stating, the Examiner has not advanced a reasonable motivation for disposing the inductor and the sensor *inside* a package while taking into account the manner in which an enclosure would be adapted to contain both an inductor and a sensor, as mentioned above.

Furthermore, it would seem more obvious for one of ordinary skill in the art to combine a sensor and an inductor such that the two are not necessarily in the same enclosure adjacent to one another. The purpose of the sensor is to measure electrical characteristics not dependent on its location relative to the inductor. Thus, absent hindsight gained from the claims themselves, no apparent motivation exists to combine these in one enclosure.

For at least these reasons, withdrawal of the rejections of independent claims 13 and 17 is requested. Accordingly, Applicants believe that claims 13 and 17 are in condition for allowance.

***Koike and Beihoff Are Not Combinable as Applied to Claim 21***

Aside for disclosing insufficient subject matter, Applicants respectfully submit that the rejection of claim 21 is improper because the prior art references that are used to reject the claims cannot be combined to render the claim obvious. For example, independent claim 21 recites “*a fluid cooled support, the power converter circuit and the inductor assembly being mounted on the fluid cooled support for extraction of heat from the inductor assembly via the mounting surface.*” (Emphasis added).

In rejecting the claim, the Examiner combined in part the teachings of Koike with those of Beihoff (U.S. Patent Application No.2003/0133257, hereinafter “Beihoff”). However, as best understood, Koike discloses a coil that “is soldered to an *insulated* substrate 21 consisting of *a glass epoxy resin, etc.*” See Koike, Abstract. Accordingly, the coil disclosed by Koike is insulated with an epoxy resin. Being an insulator (both electrically and thermally), a glass epoxy resin would severely prevent efficient thermal transfer between the coil and the substrate. Thus, combining a fluid cooled support, such as the one provided by Beihoff, would yield an uncoolable coil. Accordingly, there would be no motivation by one of ordinary skill in the art to combine the teachings of Koike and those of Beihoff to render claim 21 as obvious. Certainly, such a combination would necessarily fail in yielding a device comprising an inductor assembly mounted on fluid cooled support for extraction of heat from the inductor assembly via a mounting surface. At the very least, one skilled in the art would not reasonably expect the combination to succeed in cooling Koike’s coils, another requisite for a *prima facie* case.

For at least these reasons, the Applicants request that the rejection of independent claims 21 be withdrawn. Accordingly, Applicants believe that claim 21 and depending claims therefrom are in condition for allowance.

**Conclusion**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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